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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/695,880 | 10/28/2003 | Jeffrey Heidel | 03-2040 | 7799 |

24319 7590 06/16/2005

LSI LOGIC CORPORATION
1621 BARBER LANE
MS: D-106
MILPITAS, CA 95035

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| EXAMINER |
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ARBES, CARL J

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| ART UNIT | PAPER NUMBER |
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3729

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,880

Applicant(s)

HEIDEL, JEFFREY

Examiner

C. J. Arbes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 14-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 31-35 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date herein.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Applicant's Response to the Restriction Requirement which Requirement which mailed on or about 24 March 2005 has been duly noted but fails to overcome the Office's restriction. The burden to search and examine these two (2) separate and distinct inventions is relatively high and Applicant offers no substantive proof to show otherwise. Even if that which Applicant alleges were true, Applicant does not show any error with respect to the Office's Restriction. Therefore the Office has and continues to hold that the Restriction Requirement was and continues to be accurate and correct and that Requirement is now **made Final**. Applicant is therefore required to cancel all non-elected claims or take other appropriate action.

An Office Action on the merits of claims 1-13 and 31-35 now follows.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al (Pat No. 5,329,690), hereinafter Tsuji et al.

Tsuji et al teach a system for assembling components onto a printed circuit board (PcB). One or more kinds of substrates (which have bar codes) and at least one group of parts to be mounted on a predetermined substrate are provided. The sets of parts are supplied to a parts' mounting station of the system. The identifiable unit e.g. parts 72 is loaded and held in a parts' mounting apparatus (Cf. Cols 12 and 13). Substrates are brought to the parts' placement machine. Bar card readers located on the parts'

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mounting apparatus read a substrate bar code (Cf. Col 16). If the data on the substrate is compatible with the parts setting or mounting machine, the parts' mounting machine mounts (or populates) the circuit board (Cf. Col 16). Tsuji et al also teach that magazines can be used and these magazines hold a plurality of pallets (Cf. top of Col 17). The current status of the substrate i.e. PCB and the associated parts at a station is inputted to a host computer (Cf. Col 17). If in fact Tsuji et al do not expressly teach ...creating a database associating information about the identifiable unit... (as recited in claims 1 and 31) (which it is believed that this prior art does teach, then it would have been obvious to thus create such a database since the creation of the database would assist the assembling system to perform efficiently a traceable an small sized parts' supplying unit. As further applied to claim 4 it is held that the magazine which is taught at the top of Col 17 responds to the identifying unit being a tube. Alternatively tube having electronic parts and being conveyed to component placement (or mounting) machines is old, and hence obvious, in this art. As further applied to Claims 8 and 9 it is held that this limitation is within the ordinary skill of a POSITA and hence is given little no patentable weight. As further applied to claims 10-12 it is held to have been within the ordinary skill of a POSITA since Tsuji et al indeed teach a plurality of computers for monitoring this progress of this assembling system. As further applied to claim 31 since Tsuji et al do teach that the system is automatic and continuous it is held that it would have been obvious, assuming that Tsuji et al do not expressly teach the same to determine that there are more component carriers to load whenever the barcode on the specified component carrier is correct. Why wouldn't this determination be made?


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Similarly as applied to claims 34 and 35 if the bar code were determined to be incorrect the system would obviously want to provide a component carrier that had a correct barcode (in order to keep the operation going smoothly and efficiently) and/or to load component carriers if there are more to load.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo, can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


C. J. Arbes
Primary Examiner
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